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ARCHEOLOGICAL DISCOVERIES MADE DURING
THE EXCAVATION OF FOOTER TRENCHES IN PREPARATION
FOR RECONSTRUCTION OF THE EAST AND WEST BARRACKS
FORT FREDERICK STATE PARK, MARYLAND

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ABSTRACT

During the excavations of the footer trenches for reconstruction of the east and west barracks, two new features were found in the east barrack and the size and form of the subterranean basement or root cellar in the west barrack was established. Evidence for an original 1756 builder's trench was recognized in the west barrack. In addition, the CCC (Civilian Conservation Corps) fill in the vicinity of the west barrack exhibited uneven thicknesses on the base of the exposed west wall profile. Several test pits or trenches if dug during the planned regrading phase, may help to determine how constant or fluctuant the CCC red clay fill is in the vicinity of the west barrack. Further consideration is urged to the feasibility of constructing a shallow root cellar in the west barrack.

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INTRODUCTION

Under the auspices of the Maryland Department of Natural Resources, including the Maryland Park Service, Capital Programs, and the Maryland Geological Survey, the State of Maryland has begun reconstructing the east and west barracks at Fort Frederick State Park (18WA20). Arrangements were made with the building contractor, Floyd L. Culler, Inc., of Frederick, Maryland, to have an archeologist on the site to observe, record, and recover all significant archeological and architectural data encountered during the excavation of the footer trenches for the reconstructed barracks, installation of underground utilities, and the restoration of the 1756 ground grade around the west barrack

The photographs taken at Fort Frederick during the March 1975 excavations are on file in the Maryland Geological Survey, Division of Archeology. A selective number of photographs were also deposited with the Maryland Department of Natural Resources.

PROCEDURES AND RESULTS

Prior to my arrival to Fort Frederick State Park on March 10, 1975, the construction crew had already removed by hand most of the stone fireplace and foundation footings of the east barrack. The 15 to 18 inch thick original 1756 mortar and stone foundation and the later 1935 modern mortar and stone capping had broken up easily. The removal of the stone footings left orderly trenches where the foundation had stood. The stones were then piled up, in order to be cleaned, for use as facing on the new concrete block foundations of the east barrack.

Small but deep trenches had been dug perpendicular to both sides of the west curtain wall beneath the wooden catwalk to lay a temporary electrical line into the fort. On the interior side of the curtain wall, a gray plastic pipe was installed and ran under the base of the curtain wall 68 inches below the ground surface. On the exterior side of the curtain wall the gray pipe was only 32 inches below the surface. The red clay fill was almost twice as thick on the interior as on the exterior side being 27 and 16 inches thick respectively. The ground surface on the interior is 3 feet higher than on the exterior side. It should be noted that the base of the CCC (Civilian Conservation Corps) fill on the exterior and interior are at different elevations, which implies that the ground level previous to CCC activities was

at different elevations inside and outside the curtain wall.

Although it snowed all day on March 10th, work was begun on removing the stone fireplaces and foundations of the west barrack. In contrast to the east barrack, the CCC mortar and stone capping on the west barrack proved to be solid and would not break up by hand and it was necessary to use an air hammer. The removal of the west barrack foundations, which took four days, was not as neat as the east barrack because large sections of the foundations, when lifted by the backhoe, tore up the surrounding soils.

A Case 850 backhoe was used in removing the top soil and CCC red clay fill, totaling 12 inches in thickness, in the east barrack. No features were found as the backhoe operator skimmed the tan-beige clay subsoil with his 30 inch wide bucket (See March 1975 photographs). Next, a light front-end loader (New Holland L-35) was used to remove the loose top soil and CCC fill and to grade the east barrack to a 15 inch depth below the ground surface. All but the north end of the east barrack was graded the first day.

In grading, the loader uncovered a roughly round-shaped refuse deposit 35 feet south of the north foundation wall and near the east side of one of the fireplace footings (See Figs. 1 & 3; and March 1975 photographs). The feature was cleaned and cross sectioned and found to consist of a homogeneous black humus soil containing 16 square nails, 27 bone button

plaque, 100 bone specimens, 1 dark wine bottle string rimsherd, 1 plaster (?) fragment, 100 brick fragments, and pieces of sand, lime, and earth mortar. A soil sample was saved. When excavated, the feature turned out to be a roughly round refuse pit $4\frac{1}{2}$ feet in diameter with insloping sides. Originally, the pit may have been as much as 9 to 12 inches deeper before the CCC activities.

The building materials and material cultural contents in the pit belongs to the 18th Century. The presence of bone refuse would suggest household activity, such as bone button manufacturing.

Two days of heavy rain and drizzle followed. As a result, work was shifted to the west barrack to remove the remaining foundations. A week later the workers returned to the east barrack to deepen and enlarge the excavated area. The grade was lowered from 15 to 24 inches below the surface. Sighting features was difficult as the soil was muddy and shifted with every pass of the backhoe. Despite these conditions the backhoe exposed a concentration of rock and cultural refuse, much disturbed, 24 inches below the ground surface. I could not make out a definite feature as the immediate area was heavily displaced. The area was located on the east side of the northernmost fireplace footing (See Fig. 1; and March 1975 photographs). The cultural refuse included earthenware sherds and bone fragments.

No additional archeological findings were exposed in the east barrack. The steel reinforcing rods were laid during the morning of March 18th, and concrete footings poured in the afternoon. Photographs were taken of these activities.

The stone stair support in the southwest corner of the east barrack was removed by hand. The CCC stone capping was laid directly over the 1756 six inch thick rounded stones and sand, lime, and earth mortar. The CCC stone capping is 9 inches thick. No artifacts were found in the adjacent soil. The fill lenses dip down to 18 inches on the long sides of the 1756 stone footers, remaining 15 inches deep at the ends. The new concrete stair support footer was dug down to a 30 inch depth into the undisturbed tan-beige clay subsoil.

The excavation of the four fireplace footers, in the tan-beige clay subsoil, was begun on March 28th.

Following the pouring of the east barrack footers on March 18th, it rained Wednesday and Friday. The next three days were spent in excavating and preparing a slate road bed, for heavy cement trucks couldn't go further than the museum's hard surface turn around.

I cleaned and recorded the 150 foot long road trench cut between the museum turn around and the fort gate. No features or artifacts were found. The suspected CCC trenches run parallel to the road trench (See March 1975 photographs). The soft top soil south of the fort entrance was 10 inches thick

and overlaid a 8 to 12 inch thick undisturbed sub top soil lens. These top soils laid upon a compacted beige-tan clay varying 15 to 20 inches below the surface.

On the final day of preparing the slate road bed to the fort, I found the construction crew starting to excavate the parade ground north of the gate. I stopped their excavation and conferred with them on alternate ways of building a solid road bed. I partially cleaned this 15 x 25 foot area which was 12 to 24 inches thick below the ground surface. No features were found in the exposed beige-tan clay soil. I did locate a north-south dark soil stain in the extreme east half. I could not see the soil streak continuation as one might expect for a CCC trench. The wall profiles were equally clear of features. Nor was CCC fill evident in this area of the parade ground north of the fort gate. This excavated area was filled up with slate from the Green Spring Quarry and foundation stones from the east barrack.

The final four days were spent excavating, grading, and preparing the footer trenches in the west barrack. The Case 850 backhoe broke down and an International 2050 backhoe was rented. The operator was not familiar with this smaller machine and its shallower bucket made deeper cuts, than I desired. Further trouble with the rented backhoe caused additional delays.

Excavation began in the south end, removing 3 feet of top soil and CCC fill. The excavated soils were loaded onto dump trucks which frequently became stuck in the parade ground's soft top soil. I checked especially those areas to the west of each fireplace for refuse pits (since those found in the east barracks were in a comparable position) and watched the backhoe operator scoop the top of the undisturbed tan-beige clay subsoil for disturbances and features.

The excavated feature (subterranean basement or root cellar) found during the 1974 investigations in the north end of the west barrack exposed a 8 x 8 foot floor area $4\frac{1}{2}$ to 5 feet deep when fully excavated (See Fig. 2; and Israel 1975 Figs. 3 & 4). On the east side of the cellar feature there is inconclusive evidence indicating a sloping east wall, shelf, or sloping entrance way. See partially destroyed west barrack stratigraphy (Fig 5; and Israel 1975 Figs. 3 & 4) which resulted from the initial Backhoe Trench A-6 excavation in 1974. At Fort Ligonier a comparable 6 x 8 foot storage cellar $4\frac{1}{2}$ feet deep was found. The incline on the east wall of the cellar at Fort Ligonier is thought to be a sloping entrance way (Grimm 1970: 44-46).

South of Trench H, I troweled a 4 x 4 foot area to the west of the northernmost fireplace to check for features located below the CCC fill and for the locale's relationship

to the excavated feature immediately to the north (See Fig. 2). A 4 inch thick black humus refuse lens was found, 30 - 34 inches below the ground surface with sharp demarcation lines, which was similar to those lenses found in the 1974 Backhoe Trenches A-3 and A-4 (Israel 1975: 10-13). Artifacts found in this refuse deposit included half of a butterfly hinge, square nails, and saltglaze and delftware sherds.

Another similar refuse deposit 10 inches thick was exposed 30 inches below the surface west of Backhoe Trench A-4, and covered a 16 x 7 foot area (Fig. 2; and Israel 1975: 14-15). The artifacts from this deposit reflect the 18th Century. The cultural refuse consisted of compacted brick fragments, pieces of sand, lime, and earth mortar, square nails, bone grooved bone fragment, a lead musket ball, dark wine bottle sherds, an ornamented and 'M' stamped pewter spoon handle mid-section (Noel Hume 1970: 177-184), a hand-forged 3 lb. iron striking hammer (Masback 1973: 66), and queensware and saltglaze sherds. This lens's sharp demarcation with the beige-tan undisturbed clay beneath suggests redeposition. A post 18th Century redeposition is most probable since only 18th Century artifacts were found; and may be contributed to activities, such as CCC trenching.

Upon removing the stone foundation of the west barrack the backhoe cleaned the face of the west wall. As a result a profile of the CCC fill was plainly visible for the entire

120 foot length of the barrack. The CCC fill supported our 1974 findings (Israel 1975: 10). However, the uneven ground grade of the pre-1930's is clearer now. Beginning in the northwest corner, the west profile shows a 12 inch thick red clay fill which increases to 30 inches in thickness 5 feet to the south and then 45 feet further south gradually decreases to a 15 - 18 inch thickness at the southwest corner. This uneven west wall profile grade is also suggested in a 1933 photograph (MGS # 485A). In contrast, the east face of the west barrack east wall portrayed an even and more gradual thickening of the CCC red clay fill from the north to the south end of the barrack.

Two, possibly three, CCC trenches were exposed perpendicular to the west wall of the west barrack near the southwest corner (See March 1975 photographs). Conversely, the CCC trenches were found parallel to the east barrack stone foundations (Israel 1975: 7-8 and Fig. 1). Also see photographs on file in the Maryland Geological Survey showing CCC trenches parallel to the Officers' quarters foundation. The finding of the two or three narrow trenches in March 1975, intersecting the trench paralleling the west barrack foundation raises the possibility that the latter trench was a 1756 builder's trench intruded into by the CCC trenching activities.

In digging the footer trenches for the west barrack, a 7 foot 3 inch deep trench was dug in the north end of the

barrack. Plans call for the west barrack first floor to be 1 foot lower than the east barrack first floor. The concrete footers were poured on March 28th.

The west barrack stone stair support was mechanically lifted leaving the original 1756 stones and sand, lime, and earth mortar in situ. The 1756 support was distinguished by the roundedness of the stones and the sand, lime, and earth mortar (See March 1975 photographs).

In removing a tree trunk located between the wooden catwalk and the west barrack, a 10 x 8 x 3½ foot deep hole was dug by the backhoe. No features were found in the hole after the tree trunk was removed.

With the aid of the backhoe we easily lifted the octagonal brick capped concrete block, and upon cleaning the surface of the beige-tan clay subsoil recognized an angular soil stain. This angular soil stain alignment may be the remnants of the diamond-shaped feature noted in the 1934 archaeological plan (Reed 1934; and Figs. 2 & 4, and March 1975 photographs). Further skimming of the beige-tan clay caused the thin soil stain to disappear. The northern tip of the stain was 1½ feet south of the octagonal block's northern most side. It seems significant that the tip or point of the soil stain is in line with the center of the octagonal block. Two additional 1 x 2 inch scaffold holes were found at the north end of the 6½ foot

long brick capped concrete block, beneath the octagonal block foundation (See Fig. 2).

A line of bright green grass was evident growing along the Fort's exterior face on the north and east sides. Three color photographs were taken on March 27, to record the growth of the grass abutting and following the Fort's curtain and bastion walls (See March 1975 photographs). Perhaps the distinctive vegetation indicates a filled moat.

SUMMARY

This report is a summary of the archeological findings resulting from excavation of the new footings for the reconstruction of the east and west barracks at Fort Frederick State Park. The archeological investigations were carried out intermittently from March 10 through 28, 1975. Excavations of the porch footings are scheduled in May.

Excavation and grading of the east barrack uncovered a roughly round-shaped refuse pit. This pit is located on the east side of one of the stone fireplace footings (See Figs. 1 & 3). The artifacts from the pit reflect an 18th Century activity and identity.

A concentration of rocks and refuse was found adjacent to the east side of the northernmost fireplace footing (See Fig. 1). This feature was in disarray following heavy rains and grading, and its significance could not be determined.

Excavation and grading of the west barrack resulted in no new features. No pits were found near the fireplace footings, such as were found in the east barrack.

The excavated feature subterranean basement or root cellar found during the 1974 investigations in the north end of the west barrack revealed a 8 x 8 foot floor,

4½ feet deep cellar when fully exposed in March. A sloping entrance way on the east wall of the cellar has been suggested (See Figs. 2 & 5).

Two, possibly three, CCC (Civilian Conservation Corps) trenches were exposed perpendicular to the west wall of the west barrack. The findings of these two or three narrow trenches intersecting the trench paralleling the west wall foundation suggests that the latter trench was a 1756 builder's trench intruded into by the CCC trenches.

The removal of the west barrack stone foundation exposed the surrounding soil profiles and CCC fill. A pre-1935 uneven surface grade was apparent along the 120 foot long west face and is further substantiated in a 1933 CCC photograph (See ground grade in MGS # 485A). Beginning 5 feet south of the north foundation wall, the CCC red clay fill increases in thickness from 12 to 30 inches at the base then decreases in thickness 45 feet to the south; decreasing to 15 to 18 inches in thickness at its base in the southwest corner of the west barrack (See March 1975 photographs).

Other archeological trenches close to the southwest corner exhibited red clay fill lenses 24 to 30 inches thick (See Israel 1975: 11-13 Trench A and Backhoe Trench A-1). Conversely, the east face of the west barrack trench maintained an even top horizontal surface with a gradual thickening of the CCC red clay fill with its base sloping down toward the south end of the barrack.

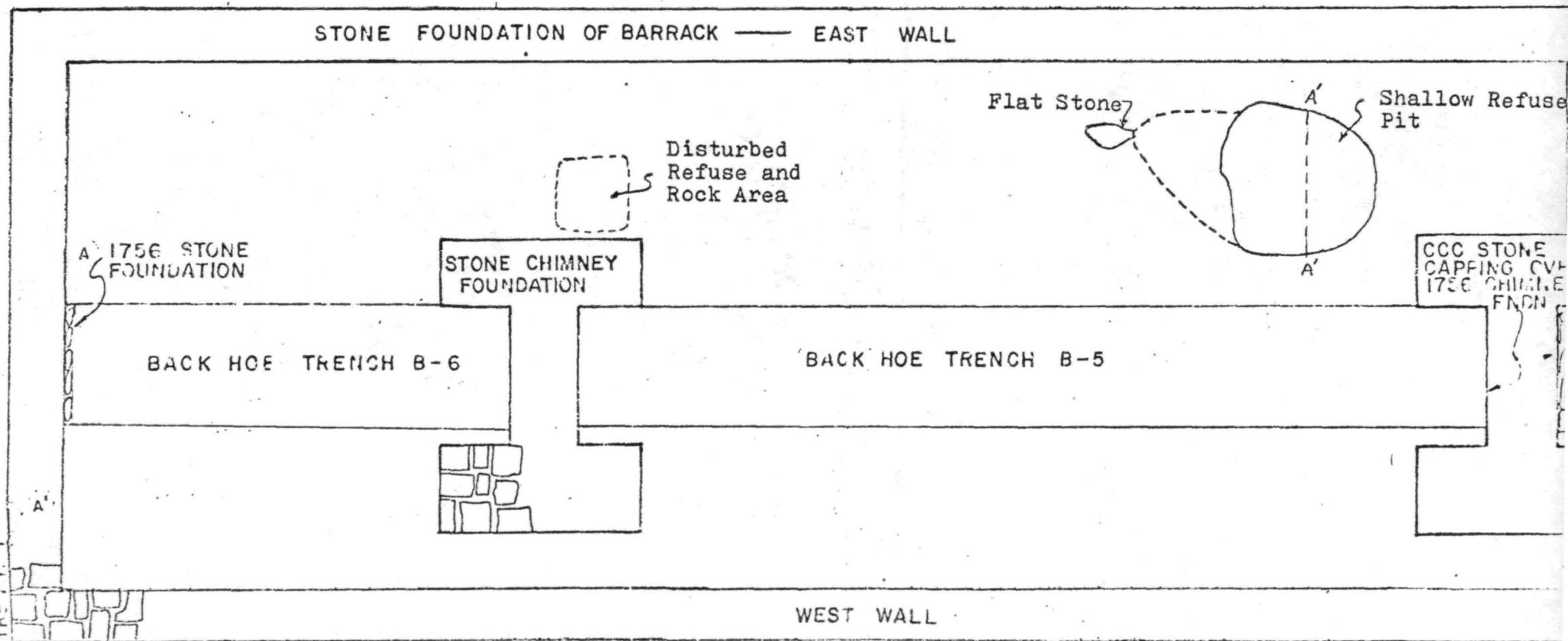


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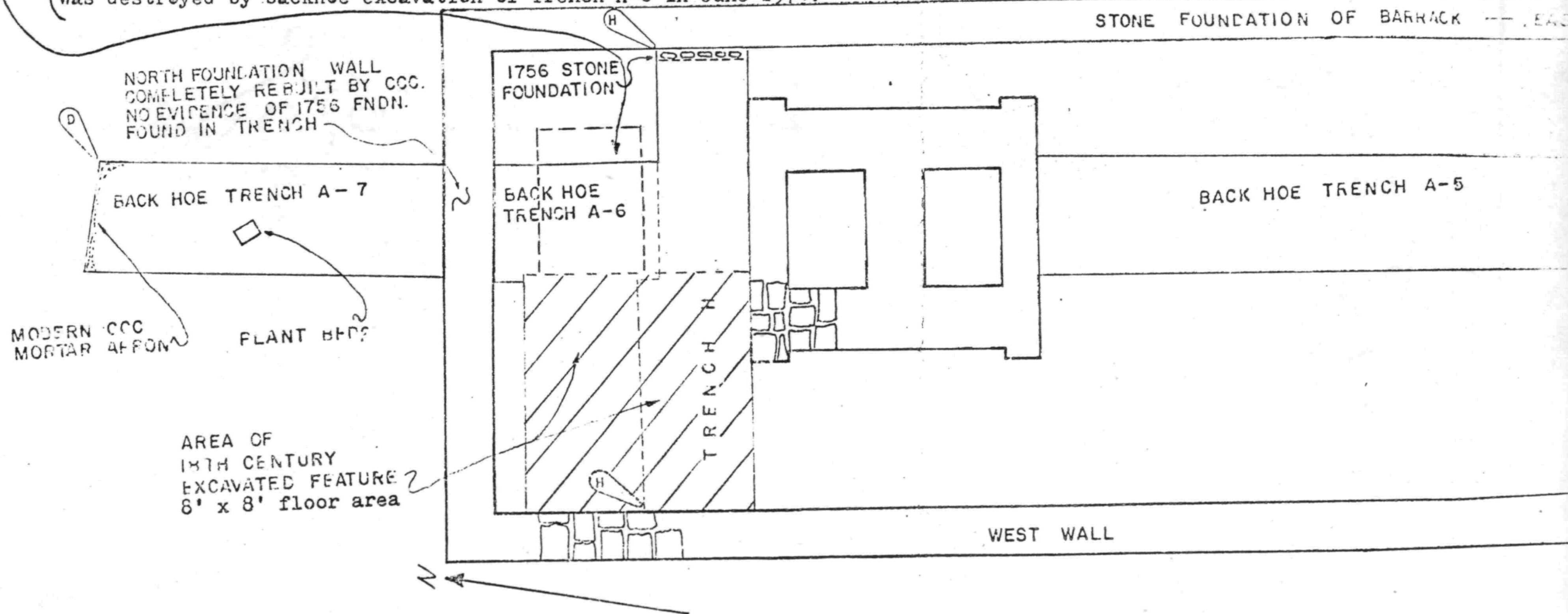
Planview of the north end
of the east barrack, Fort
Frederick.
(Base map from Israel 1975: Fig. 1)

2½ inches = 10 feet
Scale

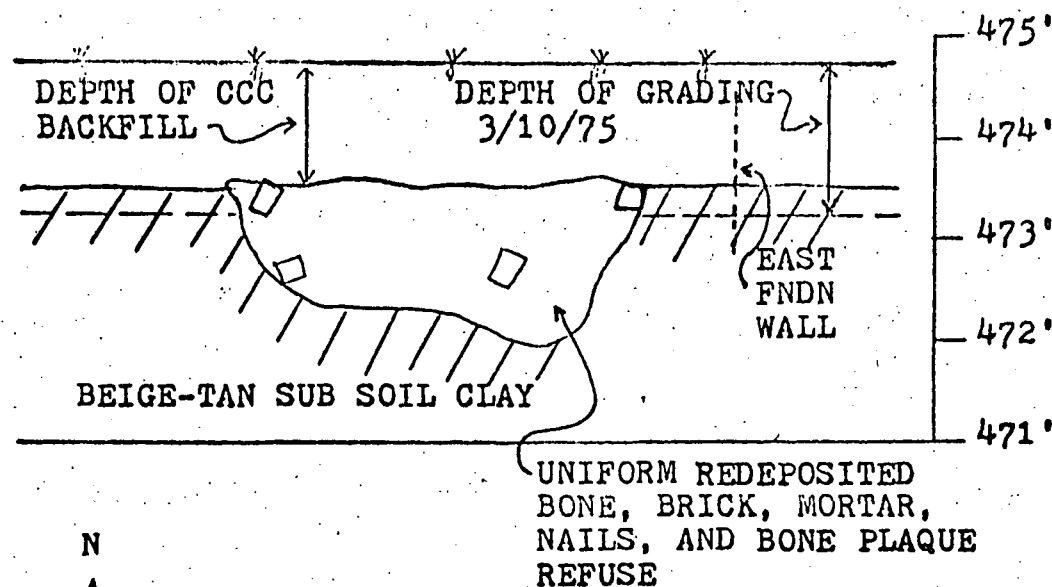


Planview of the north end
of the west barrack.
Fort Frederick. (Base map
from Israel 1975: Fig. 2)

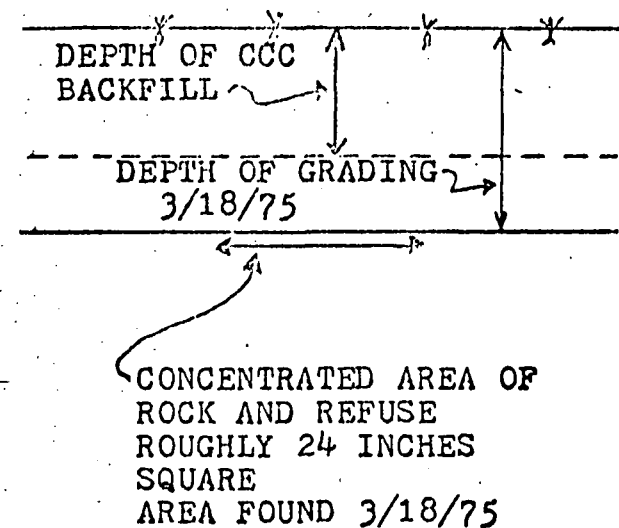
Highly conjectural
3½ foot wide sloping
entrance way (See Israel
1975a: Fig. 3: D-D and Fig. 4:
H-H) showing tapering lenses on the east wall. The stratigraphy
was destroyed by backhoe excavation of Trench A-6 in June 1974.



EAST - WEST PROFILE LOOKING NORTH - PIT FEATURE



PROFILE EAST OF NORTHERNMOST FIREPLACE FOOTING



N



FLAT
STONE

SHALLOW
LEDGE
SHELF

SHALLOW PIT
100 broken bricks
5 round stones

A'-----A'

FIGURE 3

PLANVIEW AND CROSS SECTION
OF REFUSE PIT AND CONCENTRA-
TED AREA OF ROCK AND REFUSE
IN THE EAST BARRACK

2½ inches = 5 feet
Scale

FOR LOCATION IN EAST BARRACK
SEE FIGURE 1

1974
ARCHEOLOGICAL
BACKHOE
TRENCH A-9

FIGURE 4

PLANVIEW OF BRICK CAPPED OCTAGONAL
BLOCK CONSTRUCTED BY CCC IN 1930's
AND REMOVED 11 MARCH 1975. THIS
FEATURE, EXPOSED UPON REMOVAL OF
OCTAGONAL BLOCK, MAY BE A REMNANT
OF THE DIAMOND-SHAPED BRICK FEATURE
SHOWN IN 1934 ARCHAEOLOGICAL PLAN
(REED 1934)

2½ inches = 5 feet
Scale

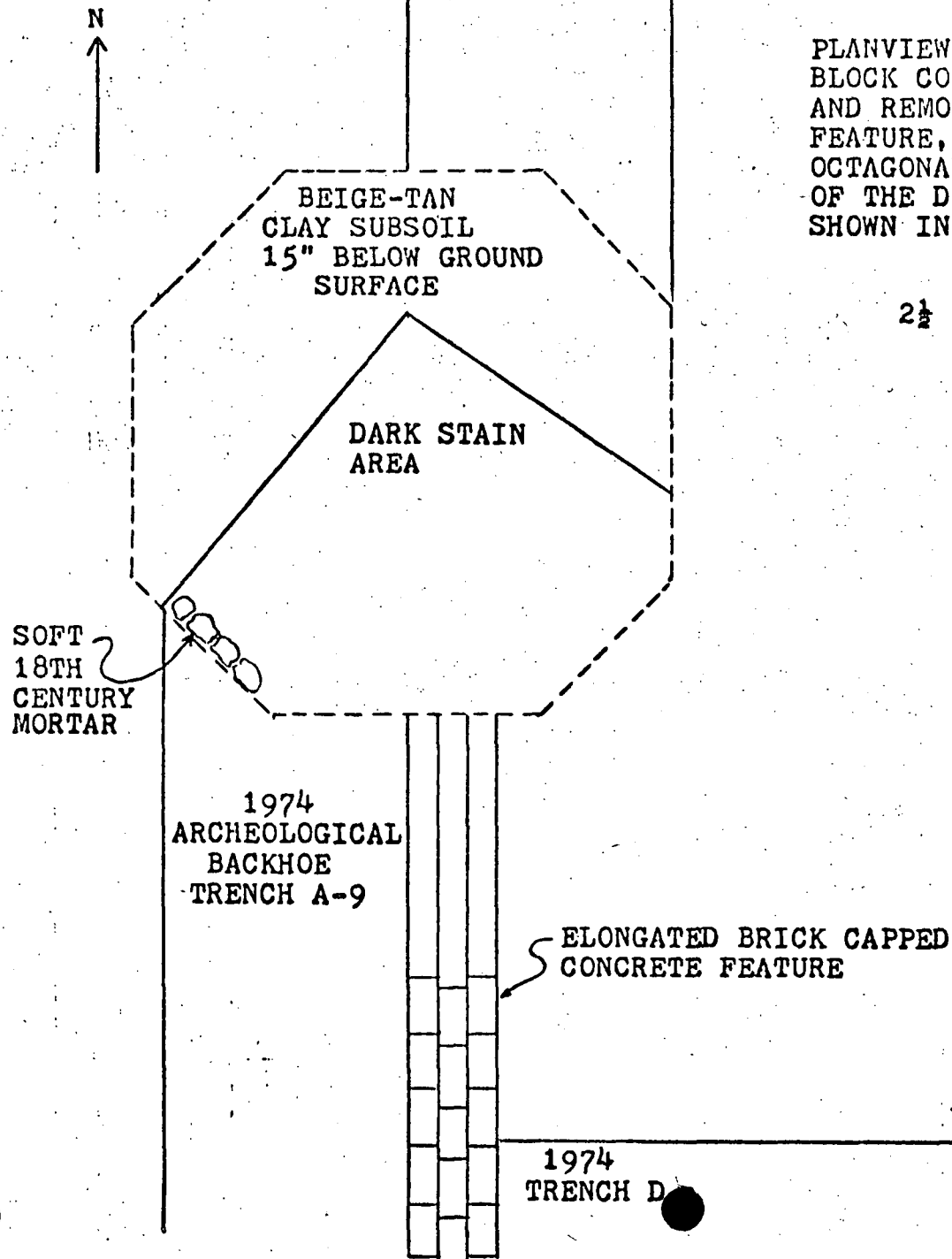


FIGURE 5

East-West Cross Section of the subterranean basement or root cellar, north profile section showing the location of the conjectured sloping entrance way

(Base map from Israel 1975 Fig. 4)

2½ inches = 5 feet

Scale

